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Automatic Fire Escape

THE AUTOMATIC
FIRE ESCAPE COMPANY

TILTON, NEW HAMPSHIRE

Automatic Fire Escape

AUTOMATIC FIRE ESCAPE

The matter of **Fire Prevention**, an important question, in which the entire public is vitally interested, has of late occupied much attention from Municipal and Civic authorities, Boards of Trade and Chambers of Commerce, and has brought about a wide spread campaign for **Safety First** in many lines.

Not the least important of these lines of investigation has been that of the practical means of quick escape from all classes of buildings occupied for business or other purposes, which may be at any time menaced by fire.

With the rapid growth of large cities in all parts of the country and the constantly changing character and height of the buildings erected, this has become an acute problem.

Various kinds of fire escapes, other than the regulation iron ladders attached to buildings, have been brought out, which have employed miscellaneous devices of ropes, pulleys, rubber and elastic seats and springs, but all of these devices have had the disadvantage of not being automatic—they required quick thought and action to operate them. In the hurry and bustle and panic of people when an alarm of fire arouses them, clear headed thought often flies out of the window, and however much merit the device itself may have under ordinary conditions, it is worthless without brains, in fact, it is proven worthless unless it will operate automatically under any conditions.

In this multiplicity of invention and devices, it has remained for The Automatic Fire Escape Company of Tilton, New Hampshire, to perfect a truly **Automatic Fire Escape**, fool proof, one that cannot get out of order and ready for instant use, its only requirement being for the person in danger to slip the life belt over his shoulders and let the weight of his body operate the machine, and it never fails to work.

The Automatic Fire Escape Company of Tilton, take pride in presenting for investigation The Automatic Fire Escape, being confident that a careful consideration of its merits will result in a verdict of popular approval and create an instant demand for its general adoption throughout the country for buildings of a private and public character, hotels, hospitals, schools and theatres, also Fire Departments and Life Saving Patrols.

The Automatic Fire Escape is small and compact, but exceedingly strong and serviceable. It is built along new, but practical and perfect mechanical lines, and possesses qualities achieved by no other Fire Escape device on the market today. It represents the last word of perfection, combining as it does, the minimum of space required for operation, the maximum of strength and durability, together with the acme of mechanical excellence, required of any device to which one would want to entrust his life.

Automatic Fire Escape

It is manufactured and sold at a moderate price and thus appeals favorably to the traveling public as well as all classes of owners of buildings.

We invite attention to the other pages of this catalog dealing with the details of the construction and operation of this remarkable Automatic Fire Escape. Correspondence regarding it will receive prompt attention. Demonstrations may be arranged for, which will show its practical working on buildings of any height. Address all communications to

THE AUTOMATIC FIRE ESCAPE CO.,

Tilton, New Hampshire.



AUTOMATIC FIRE ESCAPE
(Patent Pending.)

Portable Model No. 4. Also made in stationary style. Weight, 3½ lbs. Diameter, 4 inches. 75 feet lowering tape. Endless web woven life belt. Double re-inforced attaching hook and chain. Ready for instant use by hooking over window casing or sill.

CONSTRUCTION

The Automatic Fire Escape enters the Life Saving Field with entirely new principles of construction, that have been severely tested to prove their practical worth and merit.

Automatic Fire Escape

It is of absolutely fire proof construction throughout, having no parts that can be in any way damaged by heat or fire, requires no lubrication and will positively work at any temperature. Being thus constructed of absolutely fire proof materials, it becomes at the same time indestructible and everlasting. None of its parts deteriorate with age or ever require renewal. Therefore, once installed it is always installed, there is no aftermath of further expense.

Simplicity is one of the chief features of its perfection, as less than ten parts complete its entire assemblment.

Constructed in both stationary and portable models, it is in either form ready for quick attachment to the window casings of the rooms of any building, and provides quick and easy escape as emergency arises.

Within a four inch circular case of cold drawn pressed steel, is wound seventy-five feet of coil spring tape, oil tempered, and tested by a suspension test to a breaking strength of 2000 pounds. This steel tape is securely attached to an operating shaft of cold drawn crucible steel. The operating shaft revolves and, by a patented mechanism of three cut steel gears controlled by engagement pins with centrifugal double acting weighted levers of malleable iron, operating alternately on the carrier fulcrum, allows the steel tape to lower a suspended weight of any number of pounds at a regulated speed of about 10 feet per second from any height.

All parts are made of the finest and strongest materials the market affords, and are subjected to severe tests to guard against flaws.

In the portable model the steel attaching hook is made from drop forged steel of double strength and the suspending chains are electrically welded. At the attaching points to the ears of the cases they are reinforced by being made double thick, thus ensuring a supporting strength of many times greater than may be required by any test that may be put upon the device.

The life belt attached to the steel lowering tape is of fire proof material, endless web woven, and is firmly attached to the tape in a manner capable of withstanding any required strain.

All parts connecting to the operating shaft are specially reinforced at the point of contact.

The interior parts are finely finished and the case and attaching hook are fine enamel finish.

OPERATION

The Automatic Fire Escape is simple in its operation and requires no wit to guide it. The picture on the following page shows the device attached to the window casing of a factory and an operative descending with body straight and upright. With the portable device the hook may be attached to a fixture in construction, or hooked on or over any secure fastening. Where there are

Automatic Fire Escape



Automatic Fire Escape

wooden casings the attaching hook will hold securely to the casing by the weight of the body. The life belt is slipped over the shoulders and under the arm-pits and as the weight of the person begins to pull down the Automatic begins to pay out the lowering tape regularly and rapidly, and without jerking, the person is lowered to the ground in an upright position alighting on his feet with little jar and without the slightest loss of balance. The height from which they descend or the weight of the person makes no difference in the manner of descent, as a child will come down as easily and as quickly as a 200-lb. person. The sensation experienced by the person being lowered is similar to that of coming down in a rapidly moving elevator. It in no way disturbs the equilibrium of the most sensitive person. There are no ropes to guide, no mechanisms to work, no brakes to manipulate, hence nothing to get out of order. In the time of emergency, you simply adjust the life belt, the weight of your body starts the mechanism, and the Automatic does the lowering, promptly and effectively. By the crank on the front the lowering tape may then be re-wound by any party above and worked from the same location repeatedly or moved to another location as emergency may require. It will be readily seen that its opportunities for usefulness are many and varied. A few of them are enumerated as follows:

For Traveling. The Automatic Portable Model (No. 4) weighs only 3½ pounds and occupies only a small space in a grip, suit case or trunk. Hence it may prove invaluable to traveling men who, many times, are compelled to sleep in rooms that have no adequate fire escapes otherwise. With the Automatic absolute protection is assured as it is ready for instant use from the casing of any window.

For Hotels, Public Halls, Boarding Houses, and all buildings that may be required by law to maintain individual fire escapes, the Stationary Model Automatic Nos. 4 and 5 meet the demand for a device that is not cumbersome in appearance, is moderate in price, and that may be permanently attached to the window casing without disfiguring the room or taking up an unusual amount of room. It is easily and permanently attached by special fixtures reinforced at certain points to endure the proper strain. Its rewinding fixture thus makes each window a permanent means of escape for any number of persons, as it may be rewound quickly and used repeatedly for lowering either persons or baggage and other personal property as the exigency of the case may require.

No. 4 has 75 feet of tape.

No. 5 has 150 feet of tape.

Automatic Fire Escape



Showing No. 6, Double Tape Machine. Portable Model. With two lowering tapes, each 150 feet in length. Operating Automatically and Alternately.

The Portable Model in Double size as shown above has two lowering tapes, each 150 feet in length, operating Automatically and Alternately in the same manner as the single portable model, but with double length tapes and double carrying capacity. This model should prove an invaluable addition to the equipment of any Fire Department. No device ever invented is so extremely simple or as effective in its method of operation.

As its weight is only ten pounds it may easily be taken by any fireman to the top round of the longest ladder in use in the department and attached to the rounds by simply hooking it over and it is ready for instant use. In a double sense this machine then becomes automatic, for as the first person to be

Automatic Fire Escape

lowered is put into the life belt and sent down, another may be put into the life belt of the second tape and as the second person descends, the first tape is automatically rewound and, by the time the second person is down, another is ready to descend, and thus the lowering of people may be kept up rapidly and indefinitely or as long as there is need of action at that particular point. A child may be sent down as easily as a man. The difference in weight of the persons being lowered does not retard or accelerate the speed in the slightest. Descent is also easily made by sitting in the life belt and supporting the body balanced by one or both hands holding on the tape. As the winding mechanism is at the top, the tape is stationary and no danger arises of cutting the hands by the slipping of the tape through them. Baskets containing small children or valuables may be sent down rapidly and with perfect safety.

The Double Tape machine is also well adapted for stationary use and permanent attachment in large hotels and high buildings where two or more persons in one room might benefit by its use and its special equipment of double length tapes.

TESTS

In preliminary working tests, an ordinary No. 4 model was attached to a hoisting beam 40 feet from the ground. Anvils weighing 570 lbs. were made fast to the end of the lowering tape and the lowering device at once began to pay out the tape. The supporting beam however was not fastened securely enough to stand the strain and gave way, precipitating the device and its load by a dead fall for ten feet where it was caught and held by a projecting beam. In spite of the sudden fall and severe jerk thus occasioned, the lowering tape withstood this extreme test without the slightest shock and the 570 pounds of anvil weight was lowered to the ground easily and without jar, thus completing, accidentally, a more severe test than could have possibly been planned in any other manner, and showing conclusively the great supporting power and enormous strength of the steel tape and also the sterling construction of the entire device. This demonstration proved more than any prepared test could have done the ability of the Automatic to sustain, without injury, extreme, severe and excessive strains.

AUTOMATIC FIRE ESCAPE

Is made in the following sizes.

No. 4, weight $3\frac{1}{2}$ lbs. Tape 75 ft. Diameter 4 in.

No. 5, weight $4\frac{1}{2}$ lbs. Tape 150 ft. Diameter 5 in.

No. 6, Double size, weight 10 lbs. 2 tapes 150 ft. each. Diameter each 6 in.

Automatic Fire Escape

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